

## **REMARKS**

### **A. Status of the Claims / Claim Amendments**

Claims 1-49 were previously canceled and remain canceled.

Claims 50-54 were rejected under 35 U.S.C. §103(a) as being unpatentable over various combinations of references.

Claims 50, 52 and 54 were rejected on nonstatutory obviousness-type double patenting grounds.

Claim 50 has been amended herein in minor ways to more clearly claim the subject invention. New Claim 55, an independent claim combining the subject matter of Claims 50 and 52, has been added. New Claim 56, an independent claim combining the subject matter of Claims 50, 52 and 53, has also been added. No new matter had been added because the amended and new claims are clearly supported by the original disclosure.

Applicants respectfully request that the prior art and double patenting rejections be reconsidered and withdrawn based on the following Remarks and the Terminal Disclaimer submitted herewith.

### **B. Objections to the Specification**

Paragraphs 2-8 of the Office Action raised various objections to the Specification in connection with Examples 7 and 8. The chemical formulas in these Examples have been corrected in accordance with the Examiner's suggestions and also in accordance with the Examiner's request in the USPTO Notice dated May 4, 2009. No new matter has been added because, as observed by the Examiner, the correct forms of these formulae appear elsewhere in the original disclosure; and, they are, in any event, obvious typographical errors.

**C. Claims 50-51 and 54 – Kathirgamanathan '037 / Gao et al.**

Claims 50-51 and 54 were rejected under 35 U.S.C. §103(a) as being unpatentable over international publication WO 9858037 (Kathirgamanathan '037) in view of the Gao et al. publication.

Kathirgamanathan '037 discloses a number of compounds in which terbium is combined with ligands based on a  $\beta$ -diketone scaffold, including 2,2,6,6 tetramethyl-3,5-heptanedione and dibenzoyl methane. However, none of these disclosed ligands incorporates a pyrazole ring fused to the  $\beta$ -diketone scaffold, as claimed herein. The Examiner admits that Kathirgamanathan '037 is “silent” about metal complexes having a <sup>t</sup>BuPz ligand.

The Gao et al. publication is cited to correct this acknowledged deficiency in the teachings of Kathirgamanathan '037. However, as noted by the Examiner, Gao et al. also fails to disclose all of the components of the compounds recited in the pending claims. In particular, Gao et al. fails to disclose either the <sup>t</sup>BuPz ligand or the OPNP co-ligand

Such an admitted deficiency notwithstanding, the Examiner nevertheless makes the unsupported assertion that these chemical compound modifications would have been “obvious” to one of ordinary skill in this art at the time of this invention. But, in view of the teaching in Gao et al. that the results of changes in ligands is unpredictable, the Examiner's conclusion that it would have been “obvious” to make a compound having a combination of ligands that is not even disclosed in Gao et al. can only be premised on impermissible “hindsight.”

For these reasons, this ground of rejection should be reconsidered and withdrawn.

**D. Claim 53 – Kathirgamanathan ‘037 / Gao et al. / Qiu et al.**

Claims 53 was rejected under 35 U.S.C. §103(a) as being unpatentable over Kathirgamanathan ‘037 in view of Gao et al. and additionally in view of the Qiu et al. publication.

The deficiencies in the reference combination of Kathirgamanathan ‘037 and Gao et al. as applied to the pending claims have been set forth in part C above, and those same arguments are repeated here. The Examiner admits that Kathirgamanathan ‘037 “is silent on the use of NPB as the hole transport material.” Qiu et al. is apparently cited solely for its teachings regarding TPD and NPB as hole transporting materials. Qiu et al., however, like Kathirgamanathan ‘037 and Gao et al., fails to teach the particular chemical compounds claimed in this application, and therefore does not make up for the deficiencies of Kathirgamanathan ‘037 and Gao et al. Furthermore, there is no apparent reason why it would have been “obvious” to one of ordinary skill in this art to combine the teachings of Kathirgamanathan ‘037, Gao et al. and Qiu et al. in the particular way the Examiner has in this rejection.

For these reasons, this ground of rejection should also be reconsidered and withdrawn.

**E. Claims 50, 52 and 54 – Obviousness-Type Double Patenting**

Claims 50, 52 and 54 were rejected on the ground of nonstatutory obviousness-type double patenting over claims 1, 5-6 and 8-9 of U.S. Pat. No. 7,211,334 in view of the Marchetti et al. publication.

Applicants are submitting herewith a Terminal Disclaimer with respect to U.S. Pat. No. 7,211,334. Also submitted herewith is a copy of a USPTO Notice of Recordation of

Assignment Document establishing that the present application and U.S. Pat. No. 7,211,334 are assigned to the same assignee. Applicants respectfully submit that the Terminal Disclaimer obviates this ground of rejection.

**F. Claims 50, 52 and 54 – U.S. Pat. No. 7,211,334 / Marchetti et al.**

Claims 50, 52 and 54 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 7,211,334 in view of the Marchetti et al. publication.

As noted in part E above, Applicants are submitting herewith a Terminal Disclaimer with respect to U.S. Pat. No. 7,211,334 and a copy of a USPTO Notice of Recordation of Assignment Document establishing common ownership of the present application and U.S. Pat. No. 7,211,334. . Applicants respectfully submit that the Terminal Disclaimer obviates this ground of rejection.

**G. New Claims 55 and 56**

Applicants respectfully submit that new Claims 55 and 56 submitted herewith are clearly patentable. Claim 55 includes the recitations of Claim 52. The only prior art rejection against Claim 52 was based on U.S. Pat. No. 7,211,334, which has been addressed by the Terminal Disclaimer. Claim 56 includes the recitations of Claims 52 and 53. This new claim should therefore be considered to avoid all of the prior art and double patenting rejections in this application. Accordingly, new Claims 55 and 56 are clearly patentable.

Application Serial No. 10/537,315  
Supplemental Amendment and Response


PATENT  
Attorney Docket No.: LUC-012

**SUMMARY AND CONCLUSIONS**

For all of the foregoing reasons, Claims 50-56 are in condition for allowance and an early notice thereof is earnestly requested.

Respectfully submitted,

Date: May 8, 2009  
Andover-IP-Law  
44 Park Street, Suite 300  
Andover, MA 01810  
Telephone: (978) 470-0990  
Facsimile: (978) 470-0993

  
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David Silverstein  
Registration Number 26,336  
Attorney for Applicants